

## 03050203-050

### (Bull Swamp Creek)

#### General Description

Watershed 03050207-050 is located in Lexington, Orangeburg, and Calhoun Counties and consists primarily of **Bull Swamp Creek** and its tributaries. The watershed occupies 62,229 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Dothan-Lakeland-Vaughn series. The erodibility of the soil (K) averages 0.14 and the slope of the terrain averages 8%, with a range of 0-25%. Land use/land cover in the watershed includes: 51.7% forested land, 34.8% agricultural land, 6.3% forested wetland (swamp), 4.5% barren land, 1.8% urban land, 0.7% water, and 0.2% nonforested wetland (marsh).

Bull Swamp Creek originates near the Town of Gaston and flows through the Town of Swansea before draining into the North Fork Edisto River. Bull Swamp Creek flows through Spires Pond before accepting drainage from Boggy Branch, Fourth Creek, Third Creek (Redmond Pond), Cow Branch, Gardner Branch, and Little Bull Swamp Creek (Cowpen Swamp, Turkey Branch). Bull Swamp Creek then flows through Etheridge Mill Pond (100 acres) and into the North Fork Edisto River. There are a total of 67.5 stream miles and 411.1 acres of lake waters in this watershed, all classified FW.

#### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-034	S/W	FW	BULL SWAMP CREEK AT CULVERT, 1.1 MI NW OF SWANSEA
E-035	S/W	FW	BULL SWAMP CREEK AT US 321, 0.9 MI S OF SWANSEA
E-042	W/INT/BIO	FW	BULL SWAMP CREEK AT S-38-189

**Bull Swamp Creek** - There are three monitoring sites along Bull Swamp Creek and recreational uses are supported at all sites. All sites are part of a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Although pH excursions were noted, they were typical of values seen in such systems. At the upstream site (**E-034**), aquatic life uses are not supported due to dissolved oxygen excursions. There is a significant increasing trend in five-day biochemical oxygen demand. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter.

Further downstream (**E-035**), aquatic life uses are fully supported. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. At the furthest downstream site (**E-042**), aquatic life uses are fully supported based on macroinvertebrate community data.

## Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-040	GB	MIDDENDORF	SWANSEA

## NPDES Program

### *Active NPDES Facilities*

#### *RECEIVING STREAM*

#### *FACILITY NAME*

#### *PERMITTED FLOW @ PIPE (MGD)*

#### *NPDES#*

#### *TYPE*

#### *COMMENT*

BOGGY BRANCH

GASTON COPPER RECYCLING CORP.

PIPE #: 001 FLOW: MR

SC0034541

MINOR INDUSTRIAL

## Growth Potential

There is a low potential for growth in this watershed, which contains the Town of Swansea and portions of the Towns of Gaston and Woodford. The construction of a sewer line from the Town of Swansea to the City of Cayce WWTP may provide growth to the area.